

Curriculum Vitae

Oliver Sølund Kirsebom
6321 Yale Street, Apartment 3
Halifax, Nova Scotia
B3L 1C9, Canada

Phone: +1 902-209-9788
Email: oliver.kirsebom@gmail.com
Homepage: oliskir.github.io
ORCID ID: [0000-0001-5843-7465](https://orcid.org/0000-0001-5843-7465)

Employment history

2018–Present: Lead Acoustic Data Analyst at Institute for Big Data Analytics, Dalhousie University
2015–2018: Assistant Professor at Department of Physics and Astronomy, Aarhus University
2013–2015: Postdoc at Department of Physics and Astronomy, Aarhus University
2010–2013: Postdoc at TRIUMF

University Education

2006–2010: PhD Physics, Aarhus University*
2005–2006: Exchange programme, University of Washington
2002–2005: BSc Physics and Mathematics, Aarhus University

*Including 7 months at ISOLDE, CERN, and 1 month at Tokyo Institute of Technology.

Grants and Awards

2015: The Villum Foundation Young Investigator Programme, 580k**
2010: The Villum Foundation Postdoc Fellowship, 190k
2005: The Danish-American Fulbright Commission, 17k
2005: Nordea Danmark-fonden, 4.0k
2005: Faculty of Science, Aarhus University, 1.9k
2005: Etatsråd CG Filtenborg og Hustru Marie Filtenborgs Studieleгат, 1.0k
2005: Observator mag.scient Julie Marie Vinter Hansens Rejselegat, 1.0k
2002: International Physics Olympiad Honorable Mention

**Grant size in CAD

Publications

32 peer-reviewed research articles (10 first authorships), 21 conference proceedings, 2 feature articles, and 1 software publication. 399 citations (313 without self citations), h -index of 10, and 7.82 citations per item.¹ A few key publications are listed below. For a complete list, see my ORCID profile at orcid.org/0000-0001-5843-7465.

- O. S. Kirsebom, *et al.*, 2018. *First Accurate Normalization of the β -delayed α Decay of ^{16}N and Implications for the $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ Astrophysical Reaction Rate*, Physical Review Letters **121**, 142701. Impact factor: 8.839, Citations: 0
- J. Refsgaard, O. S. Kirsebom, *et al.*, 2016. *Measurement of the branching ratio for β -delayed α decay of ^{16}N* , Physics Letters B **752**, 296–301. Impact factor: 4.254, Citations: 7
- O. S. Kirsebom, *et al.*, 2012. *Improved Limit on Direct α Decay of the Hoyle State*, Physical Review Letters **108**, 202501. Impact factor: 8.839, Citations: 41
- O. S. Kirsebom and B. Davids, 2011. *One fewer solution to the cosmological lithium problem*, Physical Review C **84**, 058801. Impact factor: 3.304, Citations: 31
- O. S. Kirsebom, *et al.*, 2011. *Precise and accurate determination of ^8B decay spectrum*, Physical Review C **83**, 065802. Impact factor: 3.304, Citations: 15
- O. S. Kirsebom, *et al.*, 2009. *Observation of γ -delayed 3α breakup of the 15.11 and 12.71 MeV states in ^{12}C* , Physics Letters B **680**, 44–49. Impact factor: 4.254, Citations: 21

¹Source: Web of Science, 2018.09.29.

Talks

Numerous (> 40) presentations at international conferences and workshops including several invited talks, which are listed below. For a complete list, see oliskir.github.io.

Observation of the ground state transition in the beta decay of ^{20}F

2018.05.24, 14th Nordic Meeting on Nuclear Physics, Longyearbyen, Svalbard

Electron capture on ^{20}Ne and the ultimate fate of stars in the mass range $8\text{--}10M_{\odot}$

2016.12.06, 61st DAE-BRNS Symposium on Nuclear Physics, Saha Institute of Nuclear Physics, Kolkata, India

Experimental progress on clarifying the excitation spectrum of ^{12}C

2016.05.24, 11th International Conference on Clustering Aspects of Nuclear Structure and Dynamics, Napoli, Italy

Multi-particle decay studies

2015.04.16, 13th Nordic Meeting on Nuclear Physics, Saariselkä, Finland

A talk in two parts: I. Gamma rays from novae; II. New discoveries about the Hoyle state

2013.03.11, JINA Seminar, National Superconducting Cyclotron Laboratory, East Lansing MI, USA

^{12}C and the triple-alpha reaction rate

2012.10.27, 10th International Conference on Clustering Aspects of Nuclear Structure and Dynamics, Debrecen, Hungary

On the breakup of ^{12}C resonances into three alpha particles

2011.10.14, 6th Workshop on the Critical Stability of Quantum Few-Body Systems, Erice, Italy

Three-body decay: the case of $^{12}\text{C} \rightarrow 3\alpha$

2011.06.07, 4th International Conference on Proton-emitting Nuclei, Bordeaux, France

Experiment Proposals (Spokespersonships)

2016–Present: *A new probe of α -cluster structure in ^{12}C* , IPN-Orsay

2015–2018: *Search for the 2nd-forbidden ground-state transition in the β decay of ^{20}F* , JYFL

2015–2018: *Absolute measurement of the $\beta\alpha$ decay of ^{16}N* , ISOLDE

2012–2015: *β -delayed α -decay study of ^{16}N using the implantation method*, KVI

2011–2015: *Lifetime Measurement of the 7.786 MeV State in ^{23}Mg* , TRIUMF

Collaborators

Aarhus University, Denmark: Hans O. U. Fynbo, Karsten Riisager, and Aksel Jensen

CSIC, Spain: Olof Tengblad

JYFL, Finland: Anu Kankainen and Wladek Trzaska

TRIUMF, Canada: Martín Alcorta and Barry Davids

Technische Universität Darmstadt, Germany: Gabriel Martínez-Pinedo

Los Alamos National Laboratory, USA: Samuel Jones

University of York, UK: David G. Jenkins

NSCL, USA: Christopher Wrede

Université de Strasbourg: Sandrine Courtin

Teaching

2013–2017: Extracurricular programme for 1st-year students, Coordinator

2015: Nuclear astrophysics graduate course, Lecturer

2014: Electromagnetism laboratory course, Coordinator

2006–2010: Physics and mathematics undergraduate courses, Teaching Assistant

Supervision

2016–2017: Helle Bisgaard Sørensen, MSc Physics

2014–2015: Sofie Tilbæk Nielsen, BSc Physics

Referee for

Physics Review Letters, Physical Review C, Hyperfine Interactions.

Professional Memberships

2018–Present: Member of the Canadian Acoustical Association

2013–2018: Member of the Danish Physical Society